

What is claimed is:

1. A circuit board fixing table for transporting and fixing a circuit board placed on transport belts to a predetermined position, said circuit board fixing table comprising:

- 5 a fixing device for fixing said circuit board;
a support member of said transport belts;
a transport motor provided separately from said support member of said transport belt for driving said transport belt; and
10 a power transmission mechanism for transmitting a driving force of said transport motor to said transport belt.

2. The circuit board fixing table according to claim 1, wherein said power transmission mechanism links said transport motor with said transport belt when said circuit board is transported, and unlinks said transport
5 motor with said transport belt when said circuit board is not transported.

3. The circuit board fixing table according to claim 1, further comprising an elevation actuator,
wherein said power transmission mechanism includes:
a driven side power transmission member attached to
5 a driving shaft for said transport belts; and

40016321 121001

a driving side power transmission member attached to a shaft that is driven by said transport motor for rotation and provided such that said driving side power transmission member can be linked with said driven side power transmission member, and

wherein said elevation actuator elevates said driven side power transmission member and said driving side power transmission member relatively so that said driven side power transmission member links and unlinks with said driving side power transmission member.

4. The circuit board fixing table according to claim 1, wherein said power transmission mechanism includes:

a driven side power transmission member attached to a driving shaft for said transport belt; and

a driving side power transmission member attached to a shaft that is driven by said transport motor for rotation and provided such that said driving side power transmission member can be linked with said driven side power transmission member, and

wherein said fixing device elevates said transport belts so that said driven side power transmission member links and unlinks with said driving side power transmission member.

5. The circuit board fixing table according to claim 3,

wherein said elevation actuator elevates a backup plate provided under said transport belts, and

wherein said backup plate includes a plurality of
5 backup pins and pushes up and fixes said circuit board by
said back up pins when said backup plate ascends.

6. The circuit board fixing table according to claim 3,
wherein said driving side power transmission member and said driven side power transmission member are gears.

7. The circuit board fixing table according to claim 3,
wherein said driving side power transmission member and said driven side power transmission member are rollers.

8. The circuit board fixing table according to claim 1,
wherein said power transmission mechanism comprises:

a driven side power transmission member attached to
5 a driving shaft for said transport belt;

a driving side power transmission member driven by
said transport motor for rotation so that said driving side
power transmission member can be linked with said driven
side power transmission member;

10 a transport belt stretched between said driven
side power transmission member and said driving side power

transmission member with a slack; and

a tension roller for urging said transport belt to absorb the slack of said transport belt.

9. A circuit board fixing method for fixing a circuit board using a circuit board fixing table comprising a fixing device for fixing said circuit board, a support member of said transport belt including guide rails having
- 5 a driving shaft and a plurality of pulleys, a transport motor provided separately from said support member of said transport belt for driving said transport belt, a power transmission mechanism for transmitting a driving force of said transport motor to said transport belt, and an
- 10 elevation actuator, wherein said power transmission mechanism includes a driven side power transmission member attached to a driving shaft for said transport belt, a driving side power transmission member driven by said transport motor for rotation so that said driving side
- 15 power transmission member can be linked with said driven side power transmission member, wherein said driven side power transmission member and said driving side power transmission member are gears, and wherein said elevation actuator elevates said driven side power transmission
- 20 member and said driving side power transmission member relatively so that said driven side power transmission member links and unlinks with said driving side power

transmission member, said circuit board fixing method comprising the steps of:

25 canceling a linkage between said driving side power transmission member and said driven side power transmission member, and

 setting magnetizing force of said transport motor for a small value during re-establishing said linkage after
30 canceling said linkage.

10. A circuit board fixing method according to claim 9, comprising the step of:

 stopping said transport motor during re-establishing said linkage between said driving side power
5 transmission member and said driven side power transmission member after once canceling said linkage.

11. An electronic component mounting apparatus for sequentially mounting electronic components in predetermined positions on a circuit board based on input NC information with a component holding member having a
5 suction nozzle for releasably holding said electronic components, said electronic component mounting apparatus comprising:

 a circuit board fixing table for transporting and fixing a circuit board placed on transport belts to a

100-6334-121001

10 predetermined position including:

a fixing device for fixing said circuit board;

a support member of said transport belts;

a transport motor provided separately from said
support member of said transport belts for driving said
15 transport belt; and

a power transmission mechanism for transmitting a
driving force of said transport motor to said transport
belt,

wherein said circuit board fixing table fixes a
20 circuit board loaded into said electronic component
mounting apparatus, and

wherein said electronic components are mounted by
said electronic component mounting apparatus.

12. The circuit board fixing table according to claim 1,
comprising:

guide rails including two transport belts and said
support member of said transport belts,

5 wherein said guide rails are provided in parallel
to a direction of transporting said circuit board,

wherein said support member of said transport belts
includes two first pulleys provided in the direction of
transporting said circuit board, two second pulleys
10 provided in an opposite side of said first pulleys in the
direction of transporting said circuit board,

wherein each of said transport belts is slung over said first pulley and said second pulley and supports said circuit board,

15 wherein said first pulleys connected each other with a driving shaft,

wherein said driving motor is provided separately from said guide rails, and

20 wherein said power transmission member is provided with said driving shaft in order to transmit driving force of said transport motor to said transport belts.

13. The circuit board fixing table according to claim 12, further comprising a control device,

5 wherein said power transmission member includes a driven side power transmission member and a driving side power transmission member,

wherein said driven side power transmission member can be linked and unlinked with said driving side power transmission member, and

10 wherein said control device controls said transport motor in a such manner that said control device sets a magnetizing power of said transport motor for a small value or stops said transport motor magnetizing when said driven side power transmission member is linked with said driving side power transmission member again after the linkage is
15 canceled.